

LAKE AND RIVER ENHANCEMENT PROGRAM

Division of Fish and Wildlife, IDNR

Policies Regarding Sediment Removal and Exotic Plant and Animal Control September 2006

HEA 1336 was enacted in May 2003. The act increases the annual Lake and River Enhancement (LARE) fee paid by boat owners. The total amount of money generated each year is expected to be an estimated \$3.9 million.

The act stipulates that one third of the money generated will be used "...by the department of natural resources to pay for lake projects, including projects to: (A) remove sediment; or (B) control exotic or invasive plants or animals."

Use of these new LARE monies for sediment removal and exotic plant and animal control is an extension of the original LARE program. The Department has deliberated to identify the most appropriate and equitable ways to distribute the funds.

General Policies Applicable to Both Sediment Removal and Exotic Species Control

Philosophical Foundation

The purpose of the LARE program is to provide necessary funding for rational, scientifically-based, broad-scale remedial actions whose cost would otherwise prevent them from being carried out. Program funds are not intended to be used for ongoing maintenance projects such as to periodically dredge sediment traps or continually eradicate low density invasions of exotic species. The ultimate goal is to improve the ecological health of public lakes and enhance their myriad uses. The program encourages innovative, cost-effective approaches to the resolution of lake-related problems, rather than the perpetuation of antiquated, unimaginative actions that do little to resolve the problems and may, in fact, exacerbate them. Stakeholders are encouraged to actively participate in the problem resolution process to gain a better understanding of each problem's causes and necessary remediation, as well as becoming educated about lake/watershed dynamics and associated ecological balance. It is extremely useful for the lake residents and users to participate in the development of a lake/watershed diagnostic study and/or management plan in order to have the best possible understanding of the cause-effect relationships inherent to watershed land use and downstream lake ecology. Once such studies have

been completed, the participants are better prepared to make the best possible decisions about actions needed to provide long-term protection for a lake. LARE program policies are implemented by the staff of the Lake and River Enhancement Section of the Division of Fish and Wildlife in the Indiana Department of Natural Resources. The approval of applications for funding is the responsibility of the Director of the Department of Natural Resources

Funding Considerations

Funds will be available only for projects on lakes accessible to the general public. Lakes with publicly operated access sites will be granted higher priority than those which can be accessed only via commercially operated sites or other privately owned lands.

As with the original components of the LARE program, funds will not be available for projects involving state-managed lakes or lakes on state-owned properties, unless determined otherwise by the Director of the Department of Natural Resources for situations involving extraordinary circumstances.

LARE funds are not intended to replace pre-existing sources of funding for sediment removal or exotic species control. Generally, the LARE funds should be used for purposes for which no other funding was previously available.

It is not possible to predict the full range of requests that may be received for program funding each year or to anticipate the manner in which the total might need to be divided between sediment removal and control of exotic species. For this reason, no specific division of the funds will be performed until all applications have been evaluated and prioritized.

With limited exceptions, all funds will be distributed at one time each year. Funds will be made available for projects in the form of grants. Payment to project sponsors will be made in arrears, either incrementally during the course of a project, or as a whole upon project completion. Project progress will be closely monitored by LARE staff to assure consistency with LARE policies and procedures.

Applications for funding will not be accepted from individuals, but only from entities exhibiting the capability to properly represent the interests of a lake's residents and users, without any financial profit motive.

All grant awards will require a local matching contribution, the percentage of which will vary, depending upon circumstances and policies specific to the project type. "In-kind services" will generally be allowed as a portion of the local matching share.

LARE funds can be used to match funding from other sources, such as federal grants.

General Procedures/Policies

Applications must be submitted using forms provided by the LARE Section of the DNR Division of Fish and Wildlife. These forms are available on the LARE website at <http://www.in.gov/dnr/fishwild/lare/manual.html>

Applications will be evaluated by all affected divisions of DNR and funding recommendations will then be made to the Director of DNR for consideration.

Applications will be prioritized on the basis of the extent of public benefit afforded by proposed projects.

Greater priority will be afforded to projects whose sponsors have already acquired governmental permits and any other approvals required to initiate a project.

Existence of a formal watershed management plan will enhance prospects of acquiring grant funds, as will the existence of specific recommendations from a diagnostic study.

Policies Specific to Sediment Removal

The goal of sediment removal projects is to remediate ecological damage when the sediment source has been addressed and to ameliorate recreational impediments caused by sediment deposition. LARE funds may not be used for the deepening of naturally shallow areas of lakes or the excavation of ecologically beneficial wetland areas.

These policies do not anticipate the prospect of dealing with sediments contaminated by pollutants to the extent that special measures would be required for their removal and disposal. Any potential project involving such contaminated sediments will require special consideration by the Department.

Approvals for funding of sediment removal projects are based on the understanding that all reasonable care will be taken during the course of each project to assure that ecological and environmental damage are minimized. There is a general assumption that hydraulic dredging is superior to mechanical excavation in that regard, although there may be cases in which different methods might work well.

The extent to which public benefits and/or the ecological health of a lake have been impacted by sediment deposition will be taken into account in the funding prioritization process. Projects having greater overall public benefit will be a

higher funding priority than those which benefit only a few lake residents. Therefore, removal of sediment deposits from the mouth of an inlet stream, for example, will rank much higher than a project on a manmade channel into which no stream inlets, and in which the deposits consist largely of decomposing organic matter or have resulted from channel sloughing or subsidence.

Consideration of funding for removal of sediment introduced to a lake by an inlet stream will be contingent upon demonstrated efforts to apply upstream erosion control measures and assurance of long-term erosion control in the watershed and in the stream channel itself.

Projects involving “regulated drain” inlets that have deposited sediment in a lake, and that are controlled by a local drainage board, will require demonstrated cooperation on the part of the controlling entity. An instrument such as a “cooperative agreement” between a lake association and a drainage board would increase likelihood of project funding. For a project involving a “regulated drain”, the project’s priority ranking will increase if the drainage board also contributes financially to the effort.

Higher priority will be afforded to projects having the greatest prospect for long-term viability, based on local knowledge of, and activity in, the affected lake’s watershed and an attendant commitment to control future watershed erosion. Existence of a formal watershed management plan will further enhance prospects of acquiring grant funds.

If a project plan anticipates the need for a sediment trap on an inlet stream, there must be an enforceable commitment for long-term maintenance of the trap. Any long-term maintenance of this sort, or for similar maintenance of storm drain inlets, will be a very low priority for LARE funding.

A whole-lake/watershed diagnostic study will not be an absolute prerequisite for site-specific sediment removal project applications, but the extent to which a problem site and its greater environs have been scientifically analyzed will bear on its ranking in the application review process. Further, the extent to which a study’s recommendations are being/have been implemented will also bear on an application’s priority ranking. While whole-lake sediment removal projects will not be precluded from consideration for funding, their great cost will generally render them infeasible under the auspices of the LARE program.

There may be cases in which LARE funding is approved for sediment removal from a particular site(s) on a lake, but not for removing sediment from the lake’s manmade channels. In such cases, residents willing to use private funds for removal of the sediment from the channels may coordinate their efforts with the LARE project sponsors and the contractor to have the channel work performed at the time the contractor is conducting the LARE-funded work, thereby eliminating duplication of costs such as for mobilization/demobilization of equipment. The

residents will be responsible for acquiring all necessary governmental permits and other approvals for the channel work that they fund, and to share equitably in common costs such as for sediment dewatering and disposal sites.

Similarly, lakes proximal to one another that are conducting independent sediment removal projects – whether or not they are LARE-funded – may consider taking advantage of economic benefits to be derived by hiring the same contractor and/or utilizing common dewatering and/or disposal sites in order to avoid duplication of costs.

A meaningful plan describing all aspects of a sediment removal project will be required for an entity to be eligible to apply for funds for the project itself. A template will be developed by the LARE staff for such plans. LARE funds will be available for the development of a sediment removal plan, but higher priority will be granted to projects in which local residents fulfill those plan development needs themselves. Acquisition of all necessary permits and approvals, including any required for disposal areas, will be a prerequisite to application for sediment removal project funding.

Efforts of local residents in mapping and quantifying sediment deposits, developing bathymetric maps, acquiring dewatering and disposal sites, obtaining necessary governmental permits and other approvals, and otherwise providing services necessary to the conduct of a sediment removal project will be allowed to count significantly toward the required local match contribution for the actual sediment removal project grant.

Offending sediment deposits should be evaluated to determine their origin, i.e., whether they are decomposing aquatic plants that originated on the site or if they consist of eroded soil transported to the lake by an inlet stream.

A grant of \$5,000 will generally be the maximum available for development of a sediment removal plan. Applications for larger sums may be considered, depending on the lake's particular circumstances and the availability of funds in the particular year in which the application is received. A minimum of 25% of the total cost of the plan must be contributed by the project sponsor. It will be preferable for the sponsor to perform the work involved in the development of the plan so that affected residents will become intimately aware of the issues associated with the sedimentation problem.

A maximum of \$100,000 will be available for the removal of sediment from a particular site on a lake. A cumulative maximum of \$300,000 will be available for all sediment removal project sites on any single lake. (The \$300,000 maximum will be independent of the historical \$300,000 maximum for other types of LARE-funded construction projects.) For each project, a minimum of 25% of the total project cost must be contributed by the project sponsor. As much as \$20,000 of that local match can be in the form of "in-kind" services, including the value of

efforts to develop the required sediment removal plan. Sediment removal projects shall include post-dredging mapping of the project site to document the lake bottom contours at that point in time.

Grant funds may be utilized by a qualified entity to assist in the purchase or lease of dredging equipment, if it can be demonstrated that such purchase or lease would be economically justified and more cost-effective than contracting to have the work performed. Generally, no more than \$100,000 will be awarded for such a purpose. Any proposal for this type of purchase must include stipulations regarding specific usage of the equipment solely for public benefit, as well as commitments regarding the equipment's ultimate ownership and disposition. Any entity wishing to lease equipment must provide compelling evidence that it will be operated in a safe, professional manner only by trained, qualified personnel. Any purchase or lease will require a minimum local matching contribution of 25% of the total cost of the purchase or lease.

Policies Specific to Control of Exotic or Invasive Plants or Animals

The goal of exotic and/or invasive species control projects is to remediate ecological damage, ameliorate recreational impacts, and prevent the establishment of various species in new areas. It is intended that a linkage will be established between the state Aquatic Nuisance Species Management Plan and efforts undertaken with LARE funds.

There may be situations in which it would be unwise to eradicate a population of an exotic plant species if there is no likelihood of its replacement by more desirable species, thereby worsening the situation if the site becomes devoid of all vegetation. Such concerns will be taken into account during the application review process.

The Division of Fish and Wildlife will develop and revise, when necessary, a list of appropriate measures and procedures for exotic plant and animal control.

The LARE Section staff will develop and revise, when necessary, a list of exotic or invasive plants and animals for which LARE funds will be available to control. The list will not include common, ecologically desirable native species, even though some lake users may consider them to be a nuisance.

It is essential to assure that LARE funds will not be used in ways that would detrimentally affect ecologically desirable native plant and animal species, particularly those that are rare, threatened or endangered. For that reason, the expertise of the IDNR divisions of Fish and Wildlife and Nature Preserves will be utilized in the implementation of the program.

Existence of a watershed plan to address the control of nutrients flowing into a targeted lake will increase the possibility of grant funding for exotic plant control.

Preparation of a lakewide, long term, comprehensive aquatic plant management plan will be a prerequisite to eligibility for funding to control exotic or nuisance plant species. The plan should provide a strategy for protecting and sustaining desirable native plant species that are essential to the lake's ecological balance. It should include an assessment of risks to non-target plants, fish, and other animals. The plan should provide a distribution map of all aquatic plant species, not just the targeted exotic or nuisance varieties. The plan should contemplate future costs necessary to prevent recurrence of a widespread plant invasion, and determine the source(s) of the needed future funding.

Grant funds may be used to conduct an aquatic plant survey of a lake and/or to develop a lakewide, long term, comprehensive aquatic plant management plan. (A previously existing element of the LARE program allows for funding of the development of watershed management plans.) LARE funds are available to conduct aquatic plant surveys and prepare aquatic plant management plans for lakes. A minimum local match of 50% of the total cost will be required. Templates will be developed by the LARE staff for such surveys and plans.

Applications for LARE funds for plant control or treatment will not be accepted until all necessary permits or approvals have been secured from the Division of Fish and Wildlife.

Once an approved plant management plan is in place, a maximum of \$100,000 will be available, per lake, for a one-time lakewide treatment with an herbicide such as fluridone to fully eradicate aggressive, invasive macrophytes, e.g., Eurasian Water Milfoil. A minimum local match of 10% of the total project cost will be required, with up to half that percentage being the sponsor's prior contribution toward the cost of a management plan. Approval of such an effort will be contingent upon the sponsor's commitment to a total of at least four (4) years of professional control of the target species and restoration of the native plant community. Beyond the investment for an initial herbicide treatment, a cumulative total of no more than \$20,000 will be available for periodic spot treatments of the target species over a period not to exceed three (3) years following the initial treatment year. A local match of no less than 25% of the total cost will be required for the follow-up treatments.

Once an approved plant management plan is in place, a maximum of \$20,000 per year will be available, per lake, for control of less aggressive invasive species not requiring whole-lake treatment for eradication. A local match of no less than 10% of the total cost will be required. After such grants have been awarded for a particular lake for three (3) years, additional applications for such grants for that lake will become a low priority for funding.

Projects utilizing proven plant control methods will be eligible for grants, while reasonable consideration will also be given to new, potentially cost-effective techniques, such as biological controls, that could ultimately have broad economic public benefits – particularly if they have the potential to supplant the use of chemical treatments.

Funding requests will be considered for both plant and animal control projects that would have a regional or statewide application, such as funding the management of a cost-effective, innovative biological control effort for a particular exotic species. Requests might also be considered for monitoring methodologies that would allow for evaluation of program performance.

Funding requests for the control of exotic animals in individual lakes will be considered on a case-by-case basis.